



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,912	01/24/2002	Mustafa Akram	H 3933 PCT/US	7117
423	7590	08/04/2006	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			ELHILO, EISA B	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/937,912	AKRAM ET AL.	
Examiner	<b>Art Unit</b>		
Eisa B. Elhilo	1751		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 23 December 2005.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 14, 16, 17, 19-28, 31 and 32 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 14, 16-17, 19-28 and 31-32 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

1 This action is responsive to the amendment filed on December 23, 2005.

2 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/23/2005 has been entered.

3 Pending claims are 14, 16-17, 19-28 and 31-32.

### *Claim Rejections - 35 USC § 103*

4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 16-17, 19, 21-23, 26, 28 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins et al. (US 5,843,193) in view of Akram et al. (US 5,494,489).

Hawkins (US' 193) teaches a hair dyeing composition comprising cationic conditioning agent of quaternary ammonium salts and quaternary derivatives of cellulose ethers such as polyquaternium 10 as claimed in claims 14, 17 and 19 (see col. 9, lines 50-67 and col. 10, lines 56-60), wherein the cationic conditioning polymers are presented in the amounts of 0.05 to 10% which covered the claimed percentage range as claimed in claims 21-22 (see col. 9, lines 46-49), dye precursors as claimed in claims 14 and 23 (primary intermediates) (see col. 2, lines 17-67), anionic tensides (anionic surfactants) as claimed in claim 16 (see col. 7, line 9). Hawkins also

teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above, wherein the method is similar to the claimed method as claimed in claims 28 and 32 (see col. 14, lines 1-23).

The instant claims differ from the reference by reciting a composition comprising a quaternary ammonium phospholipids compounds (surfactants) of the claimed formula (I) in which R represents the claimed formula (II).

However, the primary reference teaches a dyeing composition comprising different surfactants (tensides) (see col. 6, lines 25-28).

Akram (US' 489) in analogous art of hair dyeing formulation, teaches a composition comprising tris(3-N,N-dimethyl-N-linolenamidopropyl-2-hydroxyammoniumpropyl) phosphoric acid ester-trichloride (Phospholipids EFA) (described in U.S. Pat. No. 4,209,449 incorporated herein by reference, whereas the reference's compound may be represented by a formula similar to the claimed formula (I), when in the claimed formula (I), Y is 0, A is oxy-2-hydroxypropyl (-O-CH<sub>2</sub>-CHOH-CH<sub>2</sub>-) and R<sup>3</sup> is monounsaturated C<sub>8</sub> to C<sub>18</sub> acyl radical and when in the reference the compound of tris(3-N,N-dimethyl-N-linolenamidopropyl-2-hydroxyammoniumpropyl)phosphoric acid ester-trichloride (Phospholipids EFA) represents 2-hydroxypropyl radical attached from one side to a quaternary ammonium radical carrying two methyl radicals and a tertiary amine radical having monounsaturated C<sub>18</sub> acyl radical to form a linolenamide group and attached from other side to a phosphoric radical which represents the claimed compound linoleamidopropyl PG-Dimonium chloride phosphate ((Phospholipids EFA) as claimed in claims 14, 26 and 31 (see col. 3, lines 61-64).

Therefore, In view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the primary reference by incorporating the tris(3-N,N-dimethyl-N-linolenamidopropyl-2-hydroxyammoniumpropyl) phosphoric acid ester-trichloride (Phospholipids EFA) as taught by Akram to make such a composition with a reasonable expectation of success. Such modification would be obvious because the primary reference suggests the used of surfactants (tensides) in the dyeing composition (see col. 6, lines 25-28) and the secondary reference teaches clearly that the use of Phospholipids compounds in the hair colorant composition succeeds in achieving an improvement in the area of wet-combing behavior by 48% (see col. 4, lines 48-53), and, thus, a person of the ordinary skill in the art would be motivated to incorporate the phospholipids compounds as taught by Akram et al. (US' 489) in the hair dyeing composition of Hawkins et al. (US' 193) with a reasonable expectation of success for improving the wet-combing behavior of the hair and would expect such a composition to have similar properties to those claimed, absent, unexpected results.

5       Claims 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins et al. (US 5,843,193) in view of Akram et al. (US 5,494,489) and further in view of Lim et al. (US 5,993,491).

The disclosures of Hawkins (US' 193) and Akram (US' 489) as summarized above, do not teach or disclose the conditioning component of the cationic polymer polyquaternium 2 as claimed.

However, Hawkins et al. (US' 193) suggests the use of conditioning agents such as polyquaternium 10 in the dyeing composition (see col. 10, lines 56-65).

Lim et al. (US' 491) in other analogous art of hair dyeing formulation, teaches a composition comprising one or more quaternary ammonium compounds that provide hair-conditioning effects and among these compounds a variety of polyquaternium compounds are used (see col. 9, lines 41-49).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the dyeing composition of Hawkins (US' 193) by incorporating any species of polyquaterniums includes polyquaternium 2 to arrive at the claimed invention. Such a modification would be obvious because the primary reference of Hawkins (US' 193) suggests the use of cationic conditioning agents such as polyquaternary ammonium compounds in the hair dyeing composition (see col. 10, lines 48-60). Lim et al. (US' 491) as a secondary reference clearly teaches that a variety of polyquaternium compounds are used as conditioning agents in the dyeing composition (see col. 9, lines 41-49), and, thus, a person of the ordinary skill in the art would be motivated to select and choose any species of the polyquaternium compounds includes polyquaterniu-2 as conditioning agent in the dyeing composition of Hawkins et al. (US' 193) with a reasonable expectation of success for providing hair conditioning effects and would expect such a composition to have similar properties to those claimed in the absence of contrary.

6       Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins et al. (US 5,843,193) in view of Akram et al. (US 5,494,489) and further in view of Cotteret et al. (US 5,580,357).

The disclosures of Hawkins (US' 193) and Akram (US' 489) as summarized above, do not teach or disclose at least one indole derivatives or indoline derivatives as claimed in claim

24. The references also do not teach at least one substantive dye or natural dye as claimed in claim 25.

However, the primary reference of Hawkins (US' 193) teaches a dyeing composition that may comprise a number of dyeing ingredients (primary intermediates and couplers) (see col. 2, lines 21-67 and col. 3, lines 10-55) and the secondary reference of Akram (US' 489) teaches a colorant composition comprising one or more developers, one or more couplers and direct absorbing dyes (see col. 2, lines 11-12 and lines 15-27).

Cotteret (US' 357) in other analogous art of hair dyeing formulation teaches a composition comprising indole derivatives as claimed in claim 24 (see col. 4, line 5) and substantive dyes such as azo or anthroquinone dyes as claimed in claim 25 (see col. 4, lines 8-9).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made to be motivated to modify the composition of the primary reference by incorporating the indole derivatives and the substantive dyes as taught by Cotteret to make such a composition. Such modification would be obvious because the reference of Cotteret teaches that other coupling agents (indole derivatives) and/or direct dyes (substantive dyes) are used in the composition in particular to tinting or enriching with glints the colors provided by the oxidation dye precursors (see col. 3, lines 63-67), and, thus, a person of the ordinary skill in the art would be motivated to incorporate these dyeing ingredients of indole derivatives and/or substantive dyes as taught by Cotteret et al. (US' 357) in the hair dyeing composition of Hawkins et al. (US' 193) with a reasonable expectation of success in order to enrich the color with glints, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

***Response to Applicant's Arguments***

7      Applicant's arguments filed 12/23/2005 have been fully considered but they are not persuasive.

With respect to the rejection of the claims based in view of the combined references, Applicant argues that the combined references do not disclose or even suggest that superior conditioning can be achieved with the combination of a cationic polymer and an anionic tenside

The examiner respectfully disagrees with the above argument because the combined references teach and disclose dyeing compositions comprising cationic polymers and anionic surfactants which are similar to those claimed and therefore, there is a sufficient motivation to a person of the ordinary skill in the art to apply such a composition for dyeing hair with the reasonable expectation of achieving excellent results and would expect that similar composition would have similar properties in the absence of contrary.

With respect to the arguments based on the declaration filed on May 10, 2005, the examiner's position is that the comparative data submitted in the declaration is not sufficient to rebut any *prima facie* case of obviousness because the terms "clearly better" and "slightly better" are not clearly defined and distinguished the claimed invention from the prior art compositions.

The examiner again advises the applicant to provide a data or showing to demonstrate that the claimed composition obtained unexpected and an obvious results over the composition of the closest prior art.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Eisa Elhilo  
Primary Examiner  
Art Unit 1751

August 1, 2006